

## WHAT IS CLAIMED IS:

1. Using infrared rays for quick joining a golf club head, comprising:  
a heating source of infrared rays adapted to melt metallic filler disposed  
between golf club head members within a predetermined processing  
5 temperature and time, thereby joining the golf club head members to  
constitute the golf club head.

2. Using infrared rays for quick joining a golf club head as defined in  
Claim 1, wherein either one or more of the golf club head members is  
selected from a main head body, a striking plate or a weight member.

10 3. Using infrared rays for quick joining a golf club head as defined in  
Claim 1, wherein the golf club head member is selected from a group  
consisted of titanium alloy, Fe-base alloy, magnesium alloy, aluminum alloy,  
Fe-Mn-Al alloy, shape memory steel, tungsten alloy, copper alloy, lead alloy,  
nickel alloy, bulk amorphous alloy, nano-alloy, composite material and  
15 ceramic material etc.

4. Using infrared rays for quick joining a golf club head as defined in  
Claim 1, wherein the heating source has a heating rate not less than 1 °C  
/sec.

5. Using infrared rays for quick joining a golf club head as defined in  
20 Claim 1, wherein the heating source has a heating rate up to 50 °C/sec.

6. Using infrared rays for quick joining a golf club head as defined in Claim 1, wherein the wavelength of infrared rays is ranging between 0.76 and 1,000  $\mu\text{m}$ .

7. Using infrared rays for quick joining a golf club head as defined in  
5 Claim 1, wherein the golf club head members are made of dissimilar categories of alloys.

8. Using infrared rays for quick joining a golf club head as defined in Claim 1, wherein the golf club head members are made of similar categories of alloy.

10 9. Using infrared rays for quick joining a golf club head as defined in Claim 1, wherein the golf club head members are placed in vacuum for joining process.

10. Using infrared rays for quick joining a golf club head as defined in Claim 1, wherein the golf club head members are placed in protective gas  
15 for joining process.

11. Using infrared beam for quick-welding a golf club head as defined in Claim 1, wherein the metallic filler is selected from a group consisted of Ag-base, Cu-base, Ni-base and Ti-base alloys etc.